

REMARKS

The Office Action rejects claims 1-16 and 18 and objects to claim 17.

Reconsideration of the application in view of the remarks set forth below is respectfully requested.

Rejections Under 35 U.S.C. §102

The Examiner rejected claims 1-16 and 18 under 35 U.S.C. § 102(e) as being anticipated by USPN 6,138,194 (hereafter Klein). Applicants respectfully traverse this rejection.

Anticipation under section 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773 (Fed. Cir. 1985). For a prior art reference to anticipate under section 102, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). To maintain a proper rejection under section 102, a single reference must teach each and every element or step of the rejected claim. *Atlas Powder v. E.I. du Pont*, 750 F.2d 1569 (Fed. Cir. 1984). Thus, if the claims recite even one element not found in the cited reference, the reference does not anticipate the claimed invention.

The claims recite numerous recitations that are not taught or suggested in Klein. For example, independent claims 1, 6, 10, and 12 recite an electromagnetic energy source located on a first side of a system board **proximate** a connector. The Klein reference does *not* teach or suggest this claim recitation. Further, independent claims 1 and 10 recite “an electromagnetic energy detector located on the second side of the system board” and claim 6

recites “means for detecting electromagnetic energy located on the second side of the system board.” Likewise, claim 12 recites “detecting a presence of the electromagnetic energy on the second side of the system board.” The Klein reference does not teach or suggest these features.

The Examiner correlates the optical card detector 210 of Klein, with the presently recited electromagnetic energy source and electromagnetic energy detector. Specifically, the Examiner sites the LED/optical detector combination disclosed in Klein (Col. 4, lines 35-42) with the source and detector, respectively, recited in the present claims. In other portions of the Official Action, the Examiner appears to correlate the physical slot 204 of Klein, with the presently recited connector. As clearly illustrated in Fig. 2, however, the physical slot 204 is simply one component of the bus connector 120. Regardless, the light emitting diode (LED) and optical detector included in the optical detector 210 are part of the connector and *not* located on the system board **proximate** a connector, as recited in the present claims. That is, the optical card detector 210 is located *within* the physical slot 204 of the bus connector 120. *See* Fig. 2; col. 4, lines, 30-32.

As clearly illustrated and described with reference to Fig. 2 in Klein, the optical card detector 210 is not located on a system board proximate a connector, as recited in the present claims, but rather is located *within* the bus connector 120. Klein, Fig. 2; Col. 4, lines 15-42. The Klein reference explicitly states “Fig. 2 illustrates part of the *internal* structure of a bus connector 120 in accordance with an embodiment of the present invention.” Emphasis added. As defined at <http://dictionary.reference.com>, “proximate” means, “closely related in space, time, or order; very near; proximal.” Proximate *does not* mean in or within, but rather next to or near. Accordingly, the Examiner’s characterization of the optical card detector 210 of

Klein which is clearly located within the physical slot 204 and within the bus connector 120 as the “electromagnetic energy source located on a first side of a system board proximate a connector,” as recited in the present claims, is not supportable.

Similarly, the detector portion of the optical detector 210 is *not* located on the second side of the system board, as recited in the present claims. The Examiner asserts that because the detector in Klein is located within a connector that is located on a system board, it can be said that the detector is on the system board. Applicants respectfully point out that the recited electromagnetic energy source is located on a *first side* of a system board *proximate* a connector and is directed toward a *second* opposing side of the system board on which the electromagnetic energy detector is located. The recited electromagnetic energy source is not *on* the connector, but rather is located *proximate* to the connector and is located on a first side of a system board directed toward an opposing side on which the detector is located. Because the electromagnetic energy source is proximate to a connector and is located such that it is directed toward an opposing side of the board on which the detector is located, it may be inferred that the detector being on a second side of the board opposing the energy source and the detector cannot be located on the connector itself. Accordingly, the Examiner’s assertion that the detector in Klein is located on a system board, proximate a connector, as recited in the claims of the present application is not supportable.

In view of the remarks set forth above, Applicants respectfully submit that the subject matter of independent claims 1, 6 10 and 12 is not anticipated by the Klein reference. Because the Klein reference fails to recite each of the elements in the manner set forth in the independent claims, Applicants further submit that each of the claims dependent thereon is also allowable based on the deficiencies of the Klein reference described with respect to the

independent claims. Accordingly, Applicants respectfully request withdrawal of the Examiner's rejections and allowance of claims 1-16 and 18.

Allowable Subject Matter

The Examiner objected to claim 17 as being dependent upon a rejected base claim, but indicated that it would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Accordingly, Applicants have amended claim 17 to place it in independent form. As indicated by the Examiner, claim 17 is now in condition for allowance.

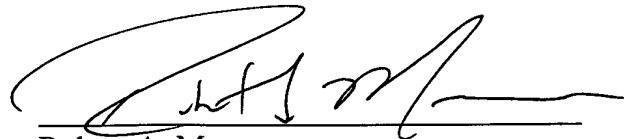
New Claim 19

Applicants have added claim 19 by the present response. Claim 19 recites, among other things, “a first electromagnetic energy source located on a first side of a system board proximate a first end of a connector,” “a second electromagnetic energy source located on top of the first electromagnetic energy source,” “a first electromagnetic energy detector located on the second side of the system board,” and “a second electromagnetic energy detector located on top of the first electromagnetic energy detector.” Applicants submit that the prior art of record does not disclose such features. Accordingly, Applicants respectfully request consideration and allowance of claim 19.

Conclusion

In view of the remarks set forth above, Applicants respectfully request allowance of claims 1-19. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,



Robert A. Manware
Reg. No. 48,758
(281) 970-4545

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, Colorado 8-527-2400